

### **REMARKS**

Reconsideration of the application in light of the following remarks is respectfully requested.

#### **Status of the Claims**

Claims 1-9 and 11-29 are pending. Claims 10, 30 and 31 were previously canceled without prejudice or disclaimer. No claims have been amended. No new matter has been added.

#### **Claim Rejections - 35 USC § 103**

Claims 1-3, 12, 13, 17-24, 26 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,701,294 to Ward et al. (hereinafter “Ward”) in view of U.S. Patent Publication No. 2001/0038630 to Tong et al. (hereinafter “Tong”), and in further view of U.S. Patent Publication No. 2003/0054829 to Moisio (hereinafter “Moisio”).

Regarding claims 1 and 22, the Examiner contends that Ward and Tong together disclose all elements recited in claim 1 except the method of communicating the class type of the user to a MAC scheduler. The Examiner further contends that Moisio discloses assigning time slots and frequency based on channel quality classifications and priorities of users (citing par. [0035] and Table 1), and that it would be obvious to combine these references with a motivation to assign different channels to users in accordance with the priority and quality classification of users.

Applicants disagree with the Examiner. Claim 1 recites “a *class type* ... based upon the *transmission link quality*” and that “a number of frequency slots assigned ... is based on the *class type* of the user” (emphasis added). In contrast, Ward discloses that combination types are identified as “the system's speech coding, channel coding, modulation, and assignable time slots” (col. 3, lines 49-52). Although Ward “monitors” radio channel quality (col. 3, lines 43-44), the assignment itself of the system's speech coding, channel coding, modulation, and assignable time

slots is to “optimize **voice quality** for the measured conditions” (col. 3, line 49, emphasis added). Ward recognizes that “voice quality” is separate from “radio channel quality” (i.e., a transmission link quality) (*see also* col. 3, lines 42-43). Therefore, Ward does not disclose or suggest using a transmission link quality to determine a class type.

Likewise, neither Tong nor Moisio disclose a class type based on transmission link quality as recited in claim 1. Rather, Tong assigns resources based on maximizing throughput for a minimum grade of service (par. [0014]).

With respect to Moisio, par. [0035] and Table 1 cited by the Examiner discuss terminals as a member of a “terminal group.” The terminal groups of Moisio are not “a **class type** ... based upon the **transmission link quality**” as recited in claim 1. Rather, in Moisio, terminals are assigned to terminal groups based on location (i.e., geography): “the cellular radio network forms in accordance with step **304** a *terminal group of the terminals within the same area*, and the cellular radio network allocates a particular set of radio channels *for each [terminal] group*” (par. [0029], emphasis added). See also step **304** of FIG. 3A, showing that “mobiles” (i.e., terminals) are grouped “according to location.” It is generally known that transmission link quality may vary in time due to factors independent of location, such as fading, changes in noise interference, changes in co-channel interference, etc. (see, e.g., par. [0003] of the present application). Therefore, grouping by location is not the same as grouping by transmission link quality.

Neither Moisio nor Tong disclose or suggest using a class type, based on **transmission link quality**, to assign transmission frequency slots and transmission time slots to the user.

Furthermore, claim 1 recites that the MAC scheduler operates “based on the class type of the user,” the class type being based upon the transmission link quality.

In contrast, the Moisio scheduler operates differently than the MAC scheduler of the present application. Moisio does not communicate a transmission-link-quality-based “class type” to a scheduler, but rather communicates a location-based “terminal group” to a base station. The priority list of [0035] and Table 1 is maintained only within one terminal group, by measuring the

quality of idle links, not transmission links (par. [0036], lines 1-3 of the 2d column). The base station controls terminals so that “two terminals belonging to the same group do not measure the same channel” (par. [0036], lines 8-10 of the 2d column) – i.e., there is not necessarily a transmission link quality measurement from the base station to each terminal. Therefore, it would not be obvious to combine the Moisio scheduler with Ward and Tong. Furthermore, the Examiner has admitted on p.10 of the Office Action mailed 11/2/2006 that the combined method of Ward and Tong fails to disclose the limitations, including the MAC scheduler, inserted in amended claim 1. Therefore, the MAC scheduler recited in claim 1 is not disclosed or suggested in any combination of Ward, Tong, or Moisio.

Ward, Tong and Moisio, either individually or in any combination, do not disclose or suggest all features recited in claim 1, therefore Applicants respectfully submit that claim 1 is allowable at least for this reason.

The remainder of the claims rejected over Ward in view of Tong, and further in view of Moisio, depend upon base independent claim 1, and are allowable at least by reason of their dependency upon an allowable base claim. Applicants request reconsideration and withdrawal of the rejection of claims 1-3, 12, 13, 17-24, 26 and 27.

Claims 4, 5, 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Tong and Moisio, and in further view of U.S. Patent No. 5,134,615 to Freeburg et al. (hereinafter “Freeburg”). These claims depend upon base independent claim 1. Applicants submit above that Ward in view of Tong and Moisio do not disclose all features recited in claim 1, therefore claims 4, 5, 7 and 8 are allowable at least by reason of their dependency upon an allowable base claim.

Claims 6 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Tong, Moisio and Freeburg, and in further view of U.S. Patent Publication No. 2005/0059401 to Chen. These claims depend upon base independent claim 1. Applicants submit above that Ward in view of Tong and Moisio do not disclose all features recited in claim 1,

therefore claims 6 and 9 are allowable at least by reason of their dependency upon an allowable base claim.

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Tong and Moisio, and further view of Chen. This claims depend upon base independent claim 1. Applicants submit above that Ward in view of Tong and Moisio do not disclose all features recited in claim 1, therefore claim 14 is allowable at least by reason of its dependency upon an allowable base claim.

Claims 11, 15, 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Tong and Moisio, and in further view of Freeburg. These claims depend upon base independent claim 1. Applicants submit above that Ward in view of Tong and Moisio do not disclose all features recited in claim 1, therefore claims 11, 15 and 16 are allowable at least by reason of their dependency upon an allowable base claim.

Claim 25 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Tong and Moisio, and in further in view of U.S. Patent No. 5,870,685 to Flynn. This claims depend upon base independent claim 1. Applicants submit above that Ward in view of Tong and Moisio do not disclose all features recited in claim 1, therefore claim 25 is allowable at least by reason of its dependency upon an allowable base claim.

Claims 28 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ward in view of Tong and Moisio, and in further view of U.S. Patent No. 6,115,390 to Chuah. These claims depend upon base independent claim 1. Applicants submit above that Ward in view of Tong and Moisio do not disclose all features recited in claim 1, therefore claims 28 and 19 are allowable at least by reason of their dependency upon an allowable base claim.

**CONCLUSION**

Each and every point raised in the Office Action mailed October 16, 2008 has been addressed on the basis of the above remarks. In view of the foregoing it is believed that claims 1-9 and 11-29 are in condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Dated: January 16, 2009

Respectfully submitted,

By /Alexander D. Walter/

Alexander D. Walter

Registration No.: 60,419

DARBY & DARBY P.C.

P.O. Box 770

Church Street Station

New York, New York 10008-0770

(212) 527-7700

(212) 527-7701 (Fax)

Attorneys/Agents For Applicant